from a collection of genomic DNA clones that have been individually isolated and arrayed unto a solid support matrix wherein each of said clones is present in a vector comprising a marker sequence encoding an activity negatively selectable in mammalian embryonic stem cells.

RESPONSE

I. Restriction Requirement

The Examiner has determined that the original claims are directed to three separate and distinct inventions under 35 U.S.C. § 121, as follows:

Group I: Claims 1-4, drawn to a collection of genomic DNA clones, classified in class 536, subclass 23.1.

Group II: Claims 5-7, drawn to a process of generating a gene-targeted animal using a clone obtained from the collection according to any of claims 1, 2, 3, or 4, classifed in class 800, subclass 21; and

Group III: Claims 5-7, drawn to a process of generating a gene-targeted cell using a clone obtained from the collection according to any of claims 1, 2, 3, or 4, classified in class 435, subclass 455.

II. Response to Restriction Requirement

In response to the Restriction Requirement, Applicants hereby elect without traverse to prosecute the claims of the Group III invention (Claims 5-7), drawn to a process of generating a gene-targeted cell using a clone obtained from the specified collection. Accordingly, claims 1-4 have been canceled herein without prejudice and without disclaimer as being drawn to non-elected inventions. Claim 5 has been amended to bodily incorporate the limitations of original Claim 1 since Claim 5 was previously dependant on Claim 1. Given that the amendment was fully supported by the Claims as originally filed, the amendment is not deemed to constitute new matter.

Applicants reserve the right to refile claims to the non-elected inventions in one or more future applications retaining the priority date of the present case and the earlier cited priority applications.

III. Status of the Claims

Claims 1-4, representing the Group I invention, have been canceled without prejudice and

and without disclaimer as being drawn to non-elected inventions. No claims of the Group III invention have been canceled.

Claims 5-7 are therefore presently pending in the case. For the convenience of the Examiner, a clean copy of the pending claims is attached hereto as **Exhibit A**. In compliance with 37 C.F.R. § 1.121(c)(1)(ii), a marked up copy of the original claims is attached hereto as **Exhibit B**.

IV. Conclusion

The present document is a complete response to the Restriction and Species Election Requirement. Applicants believe that the claims of the instant application meet all of the conditions for patentability and are in condition for allowance. Accordingly, an early indication of the same is respectfully requested. Should Examiner Whiteman have any questions or comments, or believe that certain amendments of the claims might serve to improve their clarity, a telephone call to the undersigned Applicants' representative is earnestly solicited.

Respectfully submitted,

April 24, 2003
Date

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Exhibit A

Clean Version of The Pending Claims in U.S. Patent Application Ser. No. 09/930,877

5. (Amended) A process of generating a gene targeted animal or cell using a clone obtained from a collection of genomic DNA clones that have been individually isolated and arrayed unto a solid support matrix wherein each of said clones is present in a vector comprising a marker sequence encoding an activity negatively selectable in mammalian embryonic stem cells.

6. (New) A process according to Claim 5 wherein said clone is modified by homologous recombination in yeast or bacteria.

7. (New) A process according to Claim 5 wherein said clone is modified by transposition.

Exhibit B

Marked Up Version of Amended Claims in U.S. Patent Application Ser. No. 09/930,877

1. (Cancelled) A collection of genomic DNA clones that have been individually isolated and arrayed unto a solid support matrix wherein each of said clones is present in a vector comprising a marker sequence encoding an activity negatively selectable in mammalian embryonic stem cells.

2. (Cancelled) A collection of genomic DNA clones according to Claim 1 wherein the genomic component of said clones has been sequenced for at least about 75 bases in from one or both ends of the genomic sequence present in the vector, and wherein said vector encodes a marker sequence encoding an activity negatively selectable in mammalian embryonic stem cells.

3. (Cancelled) A collection according to Claim 2 comprising at least about 500 clones.

4. (Cancelled) A collection of genomic DNA clones that have been individually isolated and arrayed unto a solid support matrix wherein each of said clones is represented in at least three distinct pools of clones that can be screened to precisely locate a clone of interest present in the collection.

5. (Amended) A process of generating a gene targeted animal or cell using a clone obtained from a collection <u>of genomic DNA clones that have been individually isolated and arrayed unto a solid support matrix wherein each of said clones is present in a vector comprising a marker sequence encoding an activity negatively selectable in mammalian embryonic stem cells</u> [according to any on of Claims 1, 2, 3, or 4].

6. (New) A process according to Claim 5 wherein said clone is modified by homologous recombination in yeast or bacteria.

7. (New) A process according to Claim 5 wherein said clone is modified by transposition.